

Patent Claims

1. A seamless, tubular food casing which is blown in an area ratio of from 1:2 to 1:10, produced from a thermoplastic mixture which comprises a) thermoplastic starch and/or a thermoplastic starch derivative and b) at least one other polymer obtainable by polycondensation or polyaddition, the weight ratio of a):b) being in the range from 90:10 to 10:90.
2. The food casing as claimed in claim 1, wherein the thermoplastic starch derivative is a starch ester, preferably a starch alkanoate, particularly preferably starch acetate.
3. The food casing as claimed in claim 1 ~~or 2~~, wherein the polymer obtainable by polycondensation is a homopolymer or copolymer containing hydroxycarboxylic acid units, preferably a polylactide, a poly(3-hydroxypropionic acid); a poly(3-hydroxybutyric acid), a poly(4-hydroxybutyric acid), polycaprolactone, a polyesterurethane, polyetherurethane, a polyesteretherurethane or a polyalkylene carbonate of the formula  $-[\text{CHR}^1-\text{CHR}^2-\text{O}-\text{CO}-\text{O}]_n$ , where  $\text{R}^1$  and  $\text{R}^2$  independently of one another are a hydrogen atom or a  $(\text{C}_1-\text{C}_4)$  alkyl radical and  $n$  is an integer from 10 to 5000.
4. The food casing as claimed in ~~one or more of claims 1 to 3~~ <sup>claim 1</sup> wherein the weight ratio a):b) is in the range from 20:80 to 80:20, preferably in the range from 40:60 to 60:40.
5. The food casing as claimed in ~~one or more of claims 1 to 4~~ <sup>claim 1</sup> wherein the thermoplastic mixture comprises at least one plasticizer, preferably glycerol, diglycerol, sorbitol, polyethylene glycol, citric acid triethyl ester, acetylcitric acid triethyl ester, glycerol

triacetate, a phthalic ester or sorbitol monoester or sorbitol diester, the proportion of plasticizer(s) being up to 30% by weight, preferably up to 15% by weight, in each case based on the total weight of the thermoplastic mixture.

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6. The food casing as claimed in ~~one or more of claims 1 to 5~~ <sup>Claim 1</sup> wherein the thermoplastic mixture comprises at least one lubricant, preferably a vegetable fat or a vegetable oil, a synthetic triglyceride, lecithin, an ethoxylated fatty alcohol or a wax, the proportion of lubricant(s) being up to 12% by weight, preferably from 2 to 6% by weight, particularly preferably from 3 to 6% by weight, in each case based on the total weight of the thermoplastic mixture.
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7. The food casing as claimed in ~~one or more of claims 1 to 6~~ <sup>B Claim 1</sup> wherein the thermoplastic mixture is mixed with fibers, preferably fibers from cotton linters, wood pulp, from regenerated cellulose, from hemp, flax, sisal or jute, the proportion of fibers being up to 25% by weight, preferably from 2 to 15, particularly preferably from 5 to 15, % by weight, in each case based on the total weight of the mixture.
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8. The food casing as claimed in ~~one or more of claims 1 to 7~~ <sup>Claim 1</sup> wherein the thermoplastic mixture comprises fillers, preferably calcium carbonate, talc, kaolin or anhydrite, the proportion of fillers being up to 12% by weight, preferably from 2 to 8% by weight, particularly preferably from 4 to 8% by weight, in each case based on the total weight of the mixture.
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9. The food casing as claimed in ~~one or more of claims 1 to 8~~ <sup>Claim 1</sup> wherein the thermoplastic mixture comprises at least one crosslinker, preferably a dicarboxylic acid, a diisocyanate or triisocyanate, a dialdehyde, a di-
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epoxide, a diimine or a silane or siloxane containing vinyl group(s), the proportion of crosslinker(s) being up to 20% by weight, preferably from 0.5 to 10% by weight, particularly preferably from 1 to 5% by weight, in each case based on the total weight of the mixture.

10. The food casing as claimed in ~~one or more of claims 1 to 9,~~ wherein it is provided with an internal preparation and/or external preparation.

11. A process for producing the food casing as claimed in ~~one or more of claims 1 to 9,~~ which comprises extruding the thermoplastic mixture through an annular die and blowing it in an area ratio of from 1.2 to 1:10.

12. The use of the food casing as claimed in ~~one or more of claims 1 to 10,~~ as synthetic sausage casing.

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